

IN THE DRAWINGS

Applicant proposes to label the blocks in the figures of the drawings in accordance with the accompanying ANNOTATED SHEETS SHOWING CHANGES.

Enclosed herewith are REPLACEMENT SHEETS in which the above changes are incorporated.

REMARKS

The claims have been amended to more clearly define the invention as disclosed in the written description. In particular, the claims have been amended for clarity.

The Examiner has rejected claims 1-4, 6 and 7 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,724,434 to Aaltonen in view of U.S. Patent 6,493,038 to Singh et al. The Examiner has further rejected claim 5 under 35 U.S.C. 103(a) as being unpatentable over Aaltonen in view of Singh et al., and further in view of U.S. Patent 6,784,945 to Norsworthy et al.

The Aaltonen patent discloses inserting one or more video pictures by combining encoded video data before decoding, in which, as shown in Fig. 2, one ES2 of two video signals ES1/ES2 is sub-sampled or scaled in a scalar 231. The other ES2 of the two video signals and the scaled video signal ES2' are then applied to a selector 232 which replaces a portion of the other ES1 of the two video signals with the scaled video signal ES2' thereby forming a composite video signal CS. This composite video signal is then applied to a decoder 210. In Fig. 5, the one video signal originates from the front end 551 of a radio frequency receiver, while the other video signal originates from DVD 552.

The Singh et al. patent discloses a PIP module in which one of a plurality of input video signals is selected and then sub-sampled (scaled) to 1/16 or 1/9 of its original size and is then

multiplexed with a YUV main signal thereby forming a composite video signal.

The subject invention relates to the combining of two video signals to form a composite video signal, and then to the decoding of the composite video signal. In particular, as claimed in claim 1, the subject invention includes "color decoding means for decoding the at least two input picture signals, the color decoding means comprising combining means for losslessly combining the at least two input picture signals into one combined picture signal, and one color decoder for decoding the one combined picture signal to form a single decoded combined picture signal" and "composing means for generating the composite output picture signal on the basis of the single decoded combined picture signal".

Applicant submits that both Aaltonen and Singh et al. find it necessary to sub-sample one of the video signals and then to replace information in the other of the video signals with the sub-sampled video signal in order to combine the video signals prior to decoding. However, as specifically indicated in claim 1, the combining means losslessly combines the at least two input picture signals. This is described in the specification on page 3, lines 8-20, in which the combining means comprises a multiplexer for interleaving images of the two picture signals, whereby if the data rate of each picture signal is the same, then the data rate of the

combined picture signal is a factor of two higher than the data rate of the input picture signals.

Further, the composing means of the subject invention processes the decoded video signal, while in both Aaltonen and Singh et al., the composing is performed prior to the decoding.


The Norsworthy et al. patent discloses a system and method for providing fast acquire time tuning of multiple signals to present multiple simultaneous images, in which a memory device is used in conjunction with a video processing unit 15 that displays picture-in-picture information.

However, Applicant submits that Norworthy et al. does not supply that which is missing from Aaltonen and Singh et al., i.e., "color decoding means for decoding the at least two input picture signals, the color decoding means comprising combining means for losslessly combining the at least two input picture signals into one combined picture signal, and one color decoder for decoding the one combined picture signal to form a single decoded combined picture signal" and "composing means for generating the composite output picture signal on the basis of the single decoded combined picture signal".

In view of the above, Applicant believes that the subject invention, as claimed, is not rendered obvious by the prior art, either individually or collectively, and as such, is patentable thereover.

Applicant believes that this application, containing claims 1-7, is now in condition for allowance and such action is respectfully requested.

Respectfully submitted,

by 
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On March 23, 2006

By Burnett Jones



ANNOTATED SHEET SHOWING CHANGES

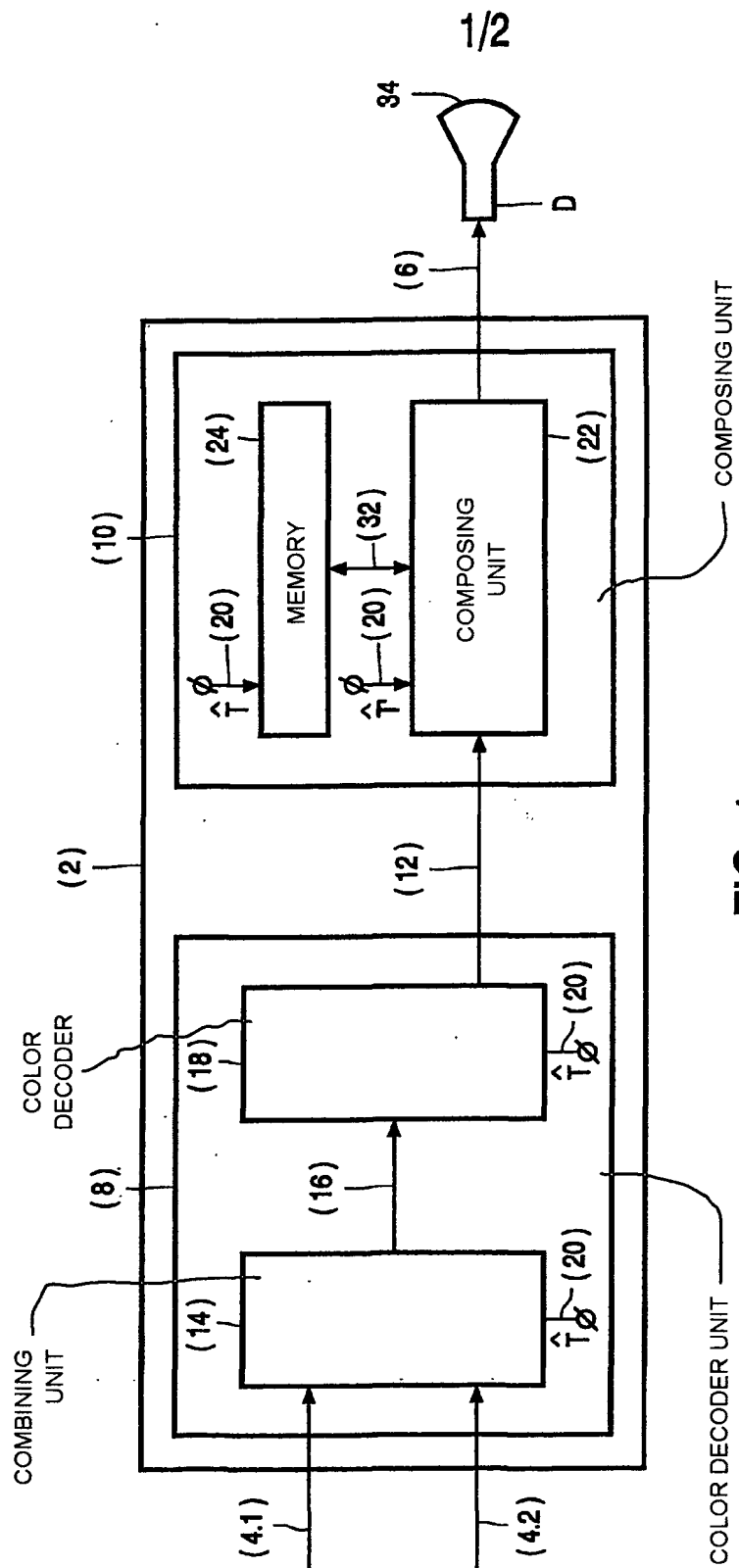


FIG. 1

ANNOTATED SHEET SHOWING CHANGES

2/2

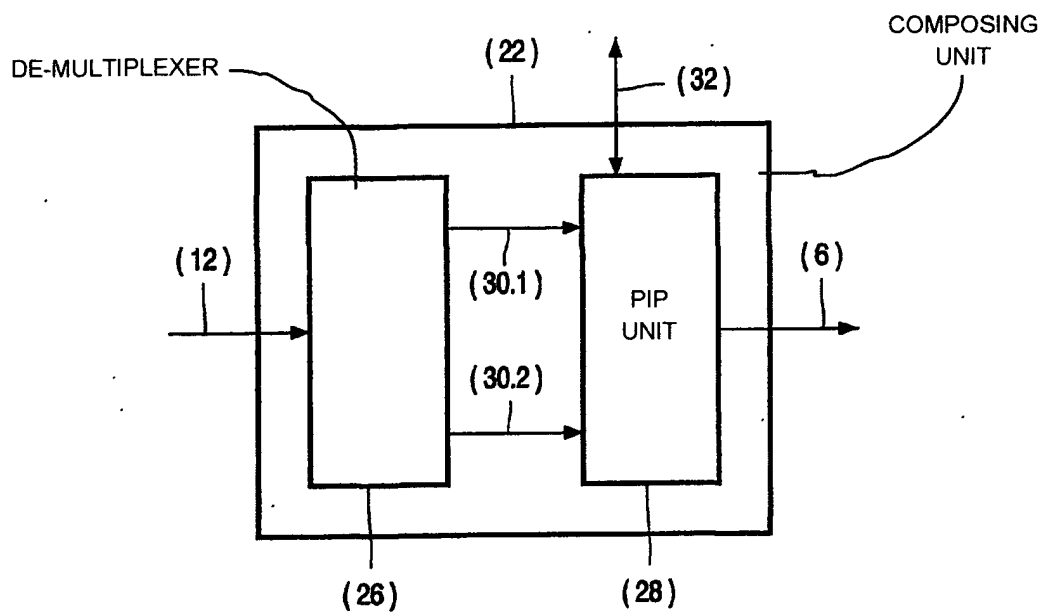


FIG. 2

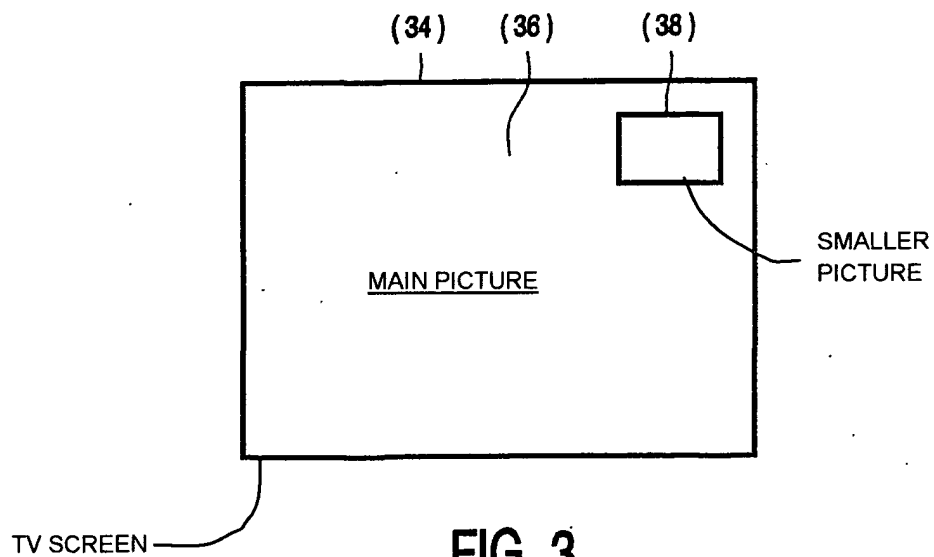


FIG. 3